R E P O R T R E S U M E S

ED 011 291 VT 001 260

PROBLEMS OF IMPLEMENTING AGRICULTURAL OCCUPATIONS PROGRAMS IN TWENTY-EIGHT SELECTED VOCATIONAL AGRICULTURE DEPARTMENTS.

BY- DUFY, CLEO A. HULL, WILLIAM L.
OKLAHOMA STATE UNIV., STILLWATER, AGRIC.-APPL.SCI.

REPORT NUMBER RB-8 PUB DATE OCT 66
EDRS PRICE MF-$0.09 HC-$1.04 26P.

DESCRIPTORS- *OFF FARM AGRICULTURAL OCCUPATIONS, EDUCATIONAL RESEARCH, *PROBLEMS, *COOPERATIVE EDUCATION, *PROGRAM DEVELOPMENT, *VOCATIONAL AGRICULTURE, INSERVICE TEACHER EDUCATION, STILLWATER, RESEARCH COORDINATING UNIT

MIGRATION FROM RURAL TO URBAN AREAS AND THE SHIFT IN LEGISLATIVE EMPHASIS FROM FARMING TO OFF-FARM AGRICULTURAL OCCUPATIONS PROMPTED THE OPERATION OF A SUMMER INSERVICE TEACHER EDUCATION INSTITUTE ON OFF-FARM AGRICULTURAL OCCUPATIONS FOR 30 VOCATIONAL AGRICULTURE TEACHERS. THE IDENTIFICATION OF PROBLEM AREAS DURING THE INSTITUTE RESULTED IN THIS STUDY TO--(1) COMPARE SCHOOLS WHICH OFFERED SEPARATE OCCUPATIONS CLASSES WITH THOSE THAT INTEGRATED THE OCCUPATIONAL EXPERIENCE STUDENTS INTO TRADITIONAL CLASSES, AND (2) IDENTIFIED DIFFICULTIES IN SECURING STUDENT TRAINING STATIONS AND ADMINISTRATIVE APPROVAL. DATA WERE COLLECTED BY USING STRUCTURED INTERVIEW SCHEDULES WITH 28 OF THE 30 TEACHERS WHO ATTENDED THE INSTITUTE. TEACHERS RANKED PROBLEMS IN THE FOLLOWING ORDER--(1) SECURING TRAINING STATIONS, (2) SECURING STUDENTS, AND (3) SECURING ADMINISTRATIVE APPROVAL. TEACHER INITIATIVE WAS THE MOST IMPORTANT FACTOR IN SECURING TRAINING STATIONS. OTHER SCHOOL ACTIVITIES INTERFERED MOST IN SECURING STUDENTS. THE GREATEST PROBLEM IN SECURING ADMINISTRATIVE APPROVAL WAS IN ARRANGING SCHOOL SCHEDULES SO THAT STUDENTS COULD PARTICIPATE IN THE PROGRAM. MULTIPLE TEACHER DEPARTMENTS WITH LARGER ENROLLMENTS PLACED MORE STUDENTS IN TRAINING STATIONS. (JM)

PROBLEMS OF IMPLEMENTING AGRICULTURAL OCCUPATIONS PROGRAMS IN TWENTY-EIGHT SELECTED VOCATIONAL AGRICULTURE DEPARTMENTS

By

Cleo A. Dupy and William L. Hull

RESEARCH BULLETIN NUMBER 8

Published Jointly By

The Vocational Research Coordinating Unit
and
The Department of Agricultural Education
Oklahoma State University

October, 1966

TABLE OF CONTENTS

PROBLEMS OF IMPLEMENTING AGRICULTURAL OCCUPATIONS PROGRAMS IN TWENTY-EIGHT SELECTED VOCATIONAL AGRICULTURE DEPARTMENTS

By Cleo A. Dupy and William L. Hull

Introduction

A mass migration of rural people from the farm to the city has characterized this past century. This steadily increasing shift from a rural to an urban society has placed vocational education in agriculture in the position of preparing youth not only for a return to the farm, but in many cases for occupations in business and industry which require an agricultural background.

Congress wrote the 1963 Vocational Education Act to meet the challenge of changing demands on educational systems. The Act authorizes agricultural education for any occupation "involving knowledge and skills in agricultural subjects." Frequently, these occupations distribute, process, or service agricultural commodities.

Compared with the Smith-Hughes Act of 1917, the 1963 Act broadens the objectives of vocational agriculture. This is reflected in the recently revised Office of Education Objectives Bulletin (OE-81011). This new responsibility challenges teachers of vocational agriculture to innovate useful methods of preparing students for employment in agricultural businesses.

Traditionally, educational innovation occurs infrequently. Adoption of successful practices may take as long as a half-century. To reduce this time-lag and encourage innovation, devices are needed to inform vocational agriculture teachers of practical methods of education for off-farm agricultural occupations.

The summer institute is a device for short-cutting the time lag ordinarily associated with adoption of practices. In the summer of 1965, the Agricultural Education Department of Oklahoma State University conducted a six-weeks' Agricultural Occupations Institute. It was financed by federal funds under the provisions of Section 4(c) of the Vocational Education Act of 1963[1]. A guidance counselor with a distributive education background and a distributive education coordinator from a large high school taught thirty vocational agriculture teachers in the training institute. It had the following objectives[2]:

1. To upgrade teachers of vocational agriculture in the distributive phases of vocational education.

2. To acquaint teachers of vocational agriculture with methods of conducting supervised training in agricultural businesses.

3. To help rural area high schools to have vocational teachers qualified to conduct broader vocational programs in distributive education.

4. To adopt existing teaching materials in distributive education to meet the needs of training programs in off-farm agricultural occupations.

The vocational agriculture teachers participated in the training program by giving seminar reports, doing committee assignments, preparing merchandise manuals, and by taking field trips to various agricultural businesses. Educating teachers to supervise students working in agricultural businesses rather than on their home farm involved the teacher with different clientele -- the businessman. Such involvement created problems and concerns for the participating teachers. This study looks at teacher problems of selecting students for the part-time cooperative occupational experience program, developing training stations in agricultural businesses, and securing the cooperation of school administrators.

---

1 Vocational Act of 1963 (P.L. 88-210).

2 Oklahoma State University Research Project No. OE-5-85-077

Objectives of the Study

The purpose of this study is to identify and document problems encountered by the Institute teachers in establishing a vocational agriculture occupations training program. More specifically, the study attempted to:

1. Compare departments that set up separate vocational agriculture occupations training classes with those that integrated the occupational-experience students into traditional classes of vocational agriculture.

2. Identify and document vocational agriculture occupations program implementation difficulties in three areas: securing students, securing training stations, and securing administrative approval.

Procedure

The teachers who had attended the Institute were interviewed at their vocational agriculture departments. The interviews took place during the months of October, November, and December of 1965. The teachers responded to questions with constructed responses as well as the open-ended type. The population of this study consisted of the thirty teachers who attended the Agricultural Occupations Institute. Two teachers were not included in the study. One became a supervisor of agricultural education soon after the close of the Institute. The other had not been interviewed at the time this investigation was summarized. Oklahoma vocational agriculture departments whose teachers participated in the 1965 summer institute are as follows:

Name of Department	Approximate Size of Community
Altus	21,000
Broken Arrow	9,000
Collinsville	3,000
Durant	13,000
El Reno	14,012
Guthrie	10,000
Hobart	6,000
Hooker	2,000

Name of Department	Approximate Size of Community
Latta	Less than 1,000
Leedey	Less than 1,000
Madill	3,000
Minco	1,200
Norman	44,000
Ponca City	28,000
Poteau	6,100
Purcell	5,000
Roland	Less than 1,000
Vinita	7,000
Watonga	3,400

Out-of-state vocational agriculture departments whose teachers participated in the 1965 summer institute were as follows:

Allegan, Michigan	6,000
Bald Knob, Arkansas	2,096
Cleveland, Tennessee	17,000
Wytheville, Virginia	6,000
Kimberly, Idaho	1,250
Louisiana, Missouri	5,400
Waco, Texas	100,000
Benton, Tennessee	1,000
Yuma, Colorado	2,100

The median test was used for testing whether two independent groups differ in central tendencies. The t test was used to test differences between two groups that were unequal in size.

Definition of Terms

Administration: The people that make up the school personnel such as the board of education, superintendent, principal, and counselor of the Institute schools.

Farm boy: A student whose father owns or manages a farm regardless of size.

Separate class agricultural occupations: Schools that set up a separate class in agricultural occupations or converted a total class into an agricultural occupations class but still called it Vocational Agriculture IV.

Traditional class: Regular vocational agriculture classes with agricultural occupations units integrated as a part of the course of study.

Training stations: Businesses where students are placed for cooperative occupational training.

Factors Associated with the Population

As discussed previously, this study includes vocational agriculture departments from many different sized communities. Geographically, the school districts range from over 1,000 square miles in a rural district to less than 44 square miles in an urban center.

The teachers in this study averaged almost twelve years of total experience. Eleven of them held master's degrees. The average age was 34 years.

Placement of students in agricultural businesses for cooperative educational experiences appears to be a major criteria for determining the success of this program. Admittedly, this study took place early in the school year. Perhaps more students will be placed in occupations later in the year. Table I shows that the number of agricultural businesses in the community had little effect on the number of students placed.

Table I shows the number of agricultural businesses in a community and the number of students placed per department. One teacher located no agricultural businesses; of course, he had no students placed for occupational training. The teachers identified from none to a high of seventy-five businesses in their respective communities. The three departments which located more than thirty businesses had only a mean of 2.7 students placed. Two of these departments were in or near large cities and one was located in a state which de-emphasized placement of students in agricultural businesses for vocational agriculture occupational training.

TABLE I

MEAN NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES COMPARED TO THE NUMBER OF AGRICULTURAL BUSINESSES LOCATED IN THE COMMUNITY BY THE TEACHERS

Number of Agricultural Businesses in Community	Number of Departments	Mean Number Students Placed
Under 10	7	1.9
11-20	14	4.9
21-30	4	5.5
Over 30	3	2.7

TABLE II

MEAN NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES PER TEACHER COMPARED TO THE TOTAL NUMBER OF STUDENTS ENROLLED IN VOCATIONAL AGRICULTURE

Total Students Per Teacher	Number of Schools	Mean Number Students Placed
Under 30	4	2.0
30-60	17	3.8
61-90	5	4.0
Over 90	2	8.0

The enrollment per department varied in number of students per teacher as shown in Table II. They varied from a high of 117 to a low of 22 students. The higher mean number of students placed were in departments with the larger number of students. Some of the smaller departments were in small agricultural communities with limited opportunities or in schools that were very selective in students that enrolled in vocational agriculture. One of the departments with over ninety students per teacher had more than one teacher and had placed eleven students.

Table III shows that the teachers had a total of 1,498 students in their departments. The non-farm total was 574, which was 38 percent of the enrollment. The off-farm placement did not increase with the greater total non-farm students. The non-farm students were apparently in vocational agriculture for reasons other than agriculture occupational training.

Organization of the Classes

Some of the departments set up a separate class in vocational agriculture occupations training or converted a senior class into their program, while other departments maintained the traditional program of vocational agriculture. In Table IV a comparison was made between these two types of programs and the tenure of the teacher in the system. The tenure ranged from a low of no years to a high of fifteen years in the present system. Eleven departments had separate or converted classes with a mean number of 6.2 students placed for occupational training. The seventeen departments with traditional programs had a mean number of 2.4 students placed for occupational training.

One out-of-state teacher had a tenure of more than ten years and he had a separate class. No out-of-state teacher had tenure from five to nine years.

TABLE III

MEAN NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES BY PERCENTAGE OF NON-FARM STUDENTS

Percent Non-Farm Students	Number of Departments	Mean Number Students	Mean Number Non-Farm Students	Mean Number Students Placed
Under 25	8	68	8	4.6
25-50	11	45	18	3.8
51-75	7	50	32	2.9
Over 75	2	58	51	4.5

TABLE IV

MEAN NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES BY TYPE OF PROGRAM AND TENURE OF THE VOCATIONAL AGRICULTURE PROGRAM IN THE PRESENT SYSTEM

Tenure of Teacher	Separate Class Agricultural Occupations		Traditional Class Agricultural Occupations Integrated	
	Number of Departments	Mean Number Students Placed	Number of Departments	Mean Number Students Placed
10 or More	4	4.5	2	0.0
5 to 9	3	10.6	6	1.0
0 to 4	4	4.5	9	3.8
Totals	11	6.2*	17	2.4*

*The difference between 6.2 and 2.4 students placed was significant at the five percent level using the median test.

Teachers from eight out-of-state schools were included in the none-to-four year tenure range. Two of these teachers organized separate classes.

Table V shows a comparison between separate classes and the integrated classes in relationship to the size of the community. The community size varied from a high of 100,000 to a low of 500 population. The mean number of students placed decreased as the size of the community increased in departments with separate classes. In departments with traditional classes, the mean number of students placed varied slightly in reverse of the separate classes.

Data in Table VI reveals that teachers of vocational agriculture tend to seek training stations in family-owned businesses. This may be due to the fact that more of this type existed in their communities. The number of employees per business did not vary greatly in all types of businesses indicating no large businesses either participated or were contacted.

The Business Community

The totals in Table VII show that ninety-four businesses are participating with the twenty-eight departments. They have 108 students working an average of sixteen hours per week at the average rate of $1.03 per hour.

The average amount received by the student was above the minimum wage that could be paid for student labor in the community, thus indicating that employers thought the student should earn more than the minimum wage. The variation in wages paid in different types of businesses was slight.

The student of vocational agriculture working the average number of hours per week at the average wage would receive an annual gross labor income of $856.96 in occupational training.

Data presented in Table VIII shows that of the 108 students placed, 68 are placed in family-owned businesses. The eleven students placed for farm employment were all family-owned farms. Corporations accounted for the placement of twenty-seven students with the lowest placement with governmental agencies.

TABLE V

MEAN NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES BY TYPE OF PROGRAM AND SIZE OF COMMUNITY

Size of Community (Population)	Separate Class Agricultural Occupations		Traditional Class Agricultural Occupations Integrated	
	Number of Departments	Mean Number Students Placed	Number of Departments	Mean Number Students Placed
10,000 or More	3	4.0	5	2.6
6,000 to 9,999	3	5.7	3	2.7
Less than 6,000	5	7.8	9	2.1
Totals	11	6.2*	17	2.4*

*The difference between 6.2 and 2.4 students placed was significant at the five percent level using the median test.

TABLE VI

NUMBER OF AGRICULTURAL BUSINESSES AND MEAN NUMBER OF EMPLOYEES WHICH WERE CONTACTED AND PARTICIPATING AS TRAINING STATIONS BY TYPE OF BYSINESS OWNERSHIP

Type of Ownership	Number of Businesses			Mean number Employees in Business	
	Contacted N	Participating N	%	Contacted	Participating
Family-Owned	177	61	34	8.8	6.3
Partnership	35	5	14	6.0	6.9
Governmental	16	3	19	4.6	4.4
Corporation	81	20	25	13.4	1.8
Cooperatives	16	5	31	6.6	7.3
Totals	325	94	29	9.3	8.8

TABLE VII

NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES, MEAN WAGE EARNED, AND NUMBER OF HOURS EMPLOYED BY TYPE OF BUSINESS

Type of Business	Number of Businesses Participating	Number of Students Placed	Mean Wage Earned Per Hour	Mean Number Hrs. worked Per Week
Farm Employment (Production Agric.)	8	11	$0.87	16
Agricultural Supply (Feed, Seed, & Fertilizer)	17	19	1.12	15
Farm Machinery Dealers	13	14	0.91	18
Horticulture Businesses	7	9	1.15	19
Other Types	49	55	1.05	16
Totals	94	108	1.03	16

TABLE VIII

NUMBER OF STUDENTS PLACED IN AGRICULTURAL BUSINESSES BY TYPE OF BUSINESS AND TYPE OF OWNERSHIP

Type of Ownership	Kinds of Businesses					
	Farm Empl.	Agri. Supply; Feed, Seed, & Fertilizer	Farm Imple.	Horti-culture	Others	Totals[a]
Family Ownership	11	10	11	7	29	68
Partnership	0	1	0	0	4	5
Governmental	0	0	0	0	3	3
Corporation	0	3	3	2	19	27
Cooperatives	0	5	0	0	0	5
Totals	11	19	14	9	55	108

[a]Total number of students placed by type of business ownership does not agree with the number of businesses listed in Table VI because more than one student worked in a business.

The smallest number of students are working in horticulture with the largest number working in businesses classified as "others." Businesses classified as "others" include all businesses not included in those listed in the above table. Some of them are as follows: hardware stores, rendering plants, filling stations, wholesale dairies, electric supply stores, training stables, governmental jobs were in city government rather than United States Department of Agriculture work. Some of the businesses employing students may not need employees with agricultural competencies, but the teachers felt justifed in placing the students in these businesses for work experience.

Student Placement in Businesses

Table IX presents data showing that twenty-two students received released time from school for occupational experience. This is 20.4 percent of the total 108 students placed for training in agricultural businesses. The greatest number of students were working after school and on weekends. The time of day students could work shows up as a problem for all teachers in securing training stations. If the students had more released school time, time of day to work might not be a problem. The teacher either did not ask or was not granted released time from school for more students to work

In Table X several factors were considered to see if these factors influenced the placement of students. Student placement being the major criteria for measuring the degree of acceptance of the agricultural occupations training program, the mean numbers placed were given as a comparison. In comparing different factors it was found that the number of teachers per department and the size of enrollment per teacher are the major factors studied that influenced student placement.

The comparison of other extreme factors, number of businesses, type of student, size of community, other programs, and selection of advisory committee had less

TABLE IX

NUMBER OF STUDENTS WORKING AT DIFFERENT TIMES IN AGRICULTURAL BUSINESSES BY TYPE OF BUSINESS

Time Worked	Production Agriculture	Agricultural Supply	Farm Mach.	Horti-culture	Other	Total
With Released School Time	0	1	6	1	14	22
No Released School Time	11	18	8	8	41	86
Totals	11	19	14	9	55	108

TABLE X

FACTORS AFFECTING STUDENT PLACEMENT IN BUSINESSES

Factors	Number of Departments	Mean Number Students Placed Per Department
Number of Agriculture Teachers		
Multiple	8	6.6*
Single	20	2.8*
Number of Agriculture Related Businesses		
Largest	5	3.4
Smallest	5	1.8
Size of Enrollment in Vocational Agriculture Per Teacher		
Largest	5	6.0
Smallest	5	1.6
Type of Agriculture Students		
Schools (Highest % of Farm Students)	5	4.6
Schools (Highest % of Non-Farm Students)	5	2.8
Size of Community		
Largest	5	4.4
Smallest	5	5.2
Distributive Education		
With	11	4.5
Without	17	3.4
Advisory Committee		
With	8	3.1
Without	20	4.1

*The difference between 6.6 and 2.8 students placed was significant at the five percent level using the t test.

effect on number of students placed. It is obvious that teachers have partial control over factors listed in Table X.

Implementation Difficulties

Table XI compares the perceived problems of the teachers in establishing training stations. The teachers were asked to rank in order of importance the five problems which they considered most difficult to overcome in establishing the training stations. A mean ranking of the problems is shown in this table making a comparison between departments that had placed four or more students with those that had placed less than four students. In the group of teachers placing zero to three students, seven of the seventeen teachers placed no students.

Teachers placing less than four students ranked the problem areas in the following order: (1) Seasonal business, (2) Extra help not needed, (3) Time of day students could work, (4) Wages too high, and (5) Ability of students. Teachers placing four or more students ranked the problem areas in the following order: (1) Extra help not needed, (2) Seasonal business, (3) Time of day students could work, (4) Labor laws for students, and (5) Ability of students. The problems of both groups were basically the same. The greatest problems and problems of little or no importance were perceived as being equal by both groups. It appears that problems perceived by the teacher in securing training stations could be overcome if he wanted this program to become a part of his total vocational agriculture program. The data indicates that the success in securing training stations is determined by the initiative of the individual teacher.

Tables XII, XIII, and XIV were set up to show information found in one question of the questionnaire. Both groups of teachers rated the scheduling of the teacher's time for the additional class as the greatest problem. The problem

TABLE XI

MEAN RANKING OF PROBLEM AREAS IN SECURING TRAINING STATIONS AS PERCEIVED BY THE INSTITUTE TEACHERS

Problem Area	Placement of Students in Business	
	Less Than Four Placed	Four or More Placed
	17 Departments	11 Departments
	Mean Rank of Problem Areas	
Wages too high	1.7	1.0
Seasonal business	3.6	3.5
Insurance on students	1.2	0.9
Reports on students	0.2	0.1
Ability of students	1.4	1.2
Labor laws for students	1.2	1.6
Extra help not needed	2.6	3.7
Employer could not understand	0.1	0.2
Resentment of employees	0.0	0.1
Students too young	0.5	0.4
Time of day students could work	2.4	2.2
Failure of students to secure Social Security number	0.0	0.0

0-No Problem, 5-Greatest Problem

TABLE XII

MEAN RANKING OF OTHER PERSONS' ATTITUDES TOWARD THE PROGRAM AS PERCEIVED BY THE INSTITUTE TEACHERS

Problem Areas	Placement of Students in Business	
	Less Than Four Placed	Four or More Placed
	17 Departments	11 Departments
	Mean Rank of Problem Areas	
Parents do not see the value of the program	0.2	0.5
Guidance counselor's attitude toward the program	0.1	0.5
Scheduling teachers' time for the additional class	2.0	3.3
Teacher cannot work the new program into his present program of vo. ag.	1.8	1.3

0-No Problem, 5-Greatest Problem

of the teacher working the new program into his present program of vocational agriculture was the second most difficult problem. The guidance counselor's attitude and the parents' attitude were rated as their least problem.

Table XIII shows the ranking of problems in securing students for placement as perceived by the teachers. Other school activities interfering with the student's time was rated to be the greatest single problem. Schools which placed four or more students revealed that the student's being busy at home was a greater problem than those placing less than four students.

As shown by Table XIV, again the greatest problem was the same for both groups. The problem, "The school's schedule could not be arranged to allow time for work or class," was found to be the most difficult problem. The fact that teachers returned to their communities after the school schedules were already made out could have had some bearing on the problem. However, some of the teachers seemed to overcome this problem. The board of education policy proved to be the least problem for both groups.

From data shown on Tables XII, XIII, and XIV, the five most difficult problems as perceived by the teachers placing less than four students were found to be as follows: (1) Other school activities interfere with student's time, (2) Scheduling teacher's time for the additional class, (3) Teacher cannot work the new program into his present program of vocational agriculture, (4) School's schedule could not be arranged to allow time for work or class, and (5) Student's supervised farming programs are too large to allow time for work, and outside school activities interfere with the student's time. Those teachers placing four or more students perceived the problems in this order: (1) Scheduling teacher's time for the additional class, (2) School's schedule could not be arranged to allow time for work or class, (3) Other school activities interfere with student's time, (4) Students are busy at home, and (5) Money is not available for books or supplies.

TABLE XIII

MEAN RANKING OF PROBLEMS IN SECURING STUDENTS AS PERCEIVED BY THE INSTITUTE TEACHERS

Problem Area	Placement of Students in Businesses	
	Less Than Four Placed	Four or More Placed
	17 Departments	11 Departments
	Mean Rank of Problem Areas	
Other school activities interfere with student's time	3.2	2.4
Student's supervised farming programs are too large to allow time for work	1.2	0.8
Outside school activities interfere with student's time	1.2	0.8
Students are busy at home	1.0	1.8

0-No Problem, 5-Greatest Problem

TABLE XIV

MEAN RANKING OF PROBLEMS IN SECURING ADMINISTRATIVE APPROVAL AS PERCEIVED BY THE INSTITUTE TEACHERS

Problem Area	Placement of Students in Businesses	
	Less Than Four Placed	Four or More Placed
	17 Departments	11 Departments
	Mean Rank of Problem Areas	
Board of Education policy	0.3	0.0
The administration does not see the need for the agricultural occupations program	0.5	0.7
School's schedule could not be arranged to allow time for work or class	1.6	2.5
Money is not available for books or supplies	0.6	1.4

0-No Problem, 5-Greatest Problem

Table XV shows a mean ranking of the three major problem areas in the different kinds of departments. The number of teachers in a department, the existence of other cooperative placement programs, and the number of students placed had no effect on the ranking. They all ranked the problems in the same order. The number one problem was securing training stations, with this problem having a mean rank of 1.6 in all departments. Second ranked problem was the securing of students, with a mean rank of 1.8. The third ranked problem was securing administrative approval, with a mean ranking of 2.6.

Summary of Findings

The placement of students for occupational training in business is the number one criteria for evaluation in this study. For the vocational agriculture occupations training to remain vocational it is imperative that some form of placement for occupational experience takes place. No attempt was made in this study to try to evaluate the curriculum being taught due to the short length of time teachers had been working with this type of program.

Some of the teachers who had placed no students were waiting until later in the school year to do so. Some of the other teachers who were classified in the group placing between zero and four students had not really gone into the program in depth and their placements for training were merely incidental.

The conclusions drawn from the study as being of greatest importance are as follows:

1. The problems as perceived by the teacher in setting up the program in order of their difficulty are: (1) Securing training stations, (2) Securing students, and (3) Securing administrative approval.
2. In securing training stations, it appears that to a great extent the success is determined by the initiative of the individual teacher.

TABLE XV

MEAN RANK OF PROBLEM AREA GROUPS AS PERCEIVED BY TEACHERS OF THE INSTITUTE BY KIND OF DEPARTMENTS

Kind of Department	Number of Departments	Problem Area		
		Securing Training Stations	Securing Administrative Approval	Securing Students
		Number of Teachers		
Multiple Teacher	8	1.4	2.7	1.9
Single Teacher	20	1.6	2.6	1.8
		Existence of Other Cooperative Placement Programs		
Other Cooperative Placement Programs	11	1.4	2.6	2.0
No Other Programs	17	1.6	2.6	1.8
		Student Placement		
Students Placed (Four or more)	11	1.5	2.9	1.6
Students Placed (Three or less)	17	1.6	2.5	1.9
Mean Rank ALL Departments	28	1.6	2.6	1.8

1-Greatest Problem, 3-Least Problem

3. In securing students the greatest problem was found to be that of other school activities interfering with the student's time.
4. In securing administrative approval, the arranging of the school's schedule to allow time for the student's participation in the program was the greatest problem.
5. The multiple teacher departments placed a mean of 6.6 students per department as compared to a mean of 2.8 students for single teacher department. This would indicate that the multiple teacher departments have more time to add new programs to the curriculum of vocational agriculture than single teacher departments.
6. In this study the teachers placed 55 out of 108 students in businesses other than farm machinery, horticulture, and agricultural supply, which have been shown by other studies to need the greatest number of employees. These businesses were either not available in the community or were not recognized by the teacher.

Implications

1. That a greater number of multiple teacher departments need to be established to carry out effectively the vocational agriculture occupational training program.
2. That teachers of vocational agriculture need additional training in working with business people.
3. That teachers need to be more aware of employment opportunities in off-farm agricultural occupations in order to select more appropriate training stations.
4. That in most situations, problems, regardless of difficulty, can be overcome and students placed for training.

5. That the teacher of vocational agriculture, if properly motivated and trained, will embark upon an innovative venture.

A SELECTED BIBLIOGRAPHY

Carlson, Richard O. Adoption of Educational Innovations. The Center for the Advanced Study of Educational Administration. University of Oregon, 1965.

Conant, James Bryant. The Education of American Teachers. New York: McGraw-Hill Book Company, Inc., 1963.

Eicholz, Gerhard, and Everett M. Rogers. "Resistance to the Adoption of Audio Visual Aids by Elementary School Teachers: Contrasts and Similarities to Agricultural Innovations." Innovations in Education. Ed. Matthew B. Miles. Columbia University: Bureau of Publications, 1964.

Gardner, John W. Self Renewal, the Individual and the Innovative Society. New York: Harper and Row, 1963.

George Barden Act of 1917.

Hoover, Norman K., and Thomas J. Weyant. "An Agri-Business Pilot Project." The Agricultural Education Magazine, (September, 1965), 55.

Mason, Ralph E., and Peter G. Haines. Cooperative Occupational Education and Work Experience in the Curriculum. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1965.

Mort, Paul R. "Studies in Educational Innovations From the Institute of Administrative Research." Innovations in Education. Ed. Matthew B. Miles. Columbia University: Bureau of Publications, 1964.

Oklahoma Research Project No. OE-5-85-077. "Training Institute to Upgrade Teachers of Vocational Agriculture in Distributive Education and Supervised Training in Off-Farm Agricultural Occupations." Oklahoma State University, 1965.

Robinson, Don W. Phi Delta Kappa Journal, XLVII, No. 3. (November, 1965), 157.

Rogers, Everett M. Diffusion of Innovations, New York: The Free Press of Glencoe, 1962.

Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1965.

Sparrow, Richard L. "Exploring Farm Related Occupations." The Agricultural Education Magazine. (April, 1964), 278.

Stevenson, William W. "A Study of Employment Opportunities and Training Needs in Off-Farm Agricultural Occupations in Oklahoma." Oklahoma State University, 1965.

The Vocational Act of 1963 (Public Law 88-210), Eighty-eighth Congress (H.R. 4955).

West, James E., Charles O. Neidt, and J. Stanley Akmann. Statistical Methods in Educational and Psychological Research. New York: Appleton-Century-Croft, Inc., 1954.

Wilson, E. F., and Morris Witten. "Training Provided in Agricultural Distribution." The Agricultural Education Magazine, (September, 1965), 54.